

IN THE CLAIMS

Please amend claims 20 and 29, and cancel claims 27-33, 43, 44 and 54-57

This listing of claims will replace all prior version and listings of claims in the application.

Listing of Claims

1. (Previously presented) A method of treating an individual who has cancer comprising the steps of identifying said cancer as a cancer that comprises cancer cells that have a high rate of aerobic glycolysis, and subsequently administering to said individual a therapeutically effective amount of a composition selected from the group consisting of: an ATP citrate lyase inhibitor, and a tricarboxylate transporter inhibitor.
2. (Original) The method of claim 1 wherein said cancer is determined to be a cancer that comprises cancer cells that have a high rate of aerobic glycolysis by PET imaging.
3. (Original) The method of claim 1 wherein said cancer is determined to be a cancer that comprises cancer cells that have a high rate of aerobic glycolysis by PET imaging using ¹⁸fluoro-deoxyglucose.
4. (Previously presented) The method of claim 1 comprising the step of administering to said individual a therapeutically effective amount of a an ATP citrate lyase inhibitor; wherein said ATP citrate lyase inhibitor is effective to induce apoptosis in greater than 50% of cells in an *in vitro* apoptosis assay at a concentration of less than 1 mM.

5. (Previously presented) The method of claim 1 comprising the step of administering to said individual a therapeutically effective amount of a an ATP citrate lyase inhibitor; wherein said ATP citrate lyase inhibitor is effective to induce apoptosis in greater than 50% of cells in an *in vitro* apoptosis assay at a concentration of less than 0.1 mM.
6. (Previously presented) The method of claim 1 comprising the step of administering to said individual a therapeutically effective amount of a an ATP citrate lyase inhibitor; wherein said ATP citrate lyase inhibitor is effective to induce apoptosis in greater than 50% of cells in an *in vitro* apoptosis assay at a concentration of less than 50 μ M.
7. (Previously presented) The method of claim 1 wherein said cancer comprises cancer cells that are not dependent on endogenously synthesized fatty acid.
8. (Previously presented) The method of claim 1 comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor; wherein said ATP citrate lyase inhibitor is selected from the group consisting of compounds having a structure defined by one of the formulae or examples set forth in U.S. Patent No. 5,447,954 and (-) hydroxycitrate.
9. (Previously presented) The method of claim 1 comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor; wherein said ATP citrate lyase inhibitor is SB-204990 shown in Figure 4.
10. (Original) A method of treating an individual identified as having cancer wherein said cancer comprises cells that are not dependent on endogenously synthesized fatty acid, said method comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor.

11. (Original) The method of claim 10 wherein said cancer is determined to be a cancer with cancer cells that have a high rate of aerobic glycolysis.

12. (Original) The method of claim 11 wherein said cancer is determined to be a cancer with cancer cells that have a high rate of aerobic glycolysis by PET imaging.

13. (Original) The method of claim 12 wherein said cancer is determined to be a cancer with cancer cells that have a high rate of aerobic glycolysis by PET imaging using ¹⁸fluoro-deoxyglucose.

14. (Previously presented) The method of claim 10 wherein said ATP citrate lyase inhibitor is administered in conjunction with administration of a different anti-cancer compound.

15. (Previously presented) The method of claim 10 wherein said ATP citrate lyase inhibitor is administered in conjunction with administration of anti-cancer radiation therapy.

16. (Previously presented) A method of treating an individual identified as having cancer comprising a step selected from the group consisting of:
administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor; wherein said ATP citrate lyase inhibitor is effective to induce apoptosis in greater than 50% of cells in an *in vitro* apoptosis assay at a concentration of less than 1 mM; and,
administering to said individual a therapeutically effective amount of a tricarboxylate transporter inhibitor.

17. (Previously presented) The method of claim 16 comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor, wherein said

ATP citrate lyase inhibitor is effective to induce apoptosis in greater than 50% of cells in an *in vitro* apoptosis assay at a concentration of less than 0.1 mM.

18. (Previously presented) The method of claim 16 comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor, wherein said ATP citrate lyase inhibitor is effective to induce apoptosis in greater than 50% of cells in an *in vitro* apoptosis assay at a concentration of less than 50 μ M.

19. (Previously presented) The method of claims 16 comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor, wherein said cancer comprises cells that are not dependent on endogenously synthesized fatty acid.

20. (Currently Amended) The method of claim 16 comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor, wherein ATP citrate lyase inhibitor is selected from the group consisting of: (-) hydroxycitrate and compounds having a structure defined by one of the formulae or examples set forth in U.S. Patent No. 5,447,954.

21. (Previously presented) The method of claim 16 comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor, wherein said ATP citrate lyase inhibitor is SB-204990 shown in Figure 4.

22. (Previously presented) The method of claim 16 comprising the step of administering to said individual a therapeutically effective amount of an ATP citrate lyase inhibitor, wherein said cancer is determined to be a cancer with cancer cells that have a high rate of aerobic glycolysis.

23. (Original) The method of claim 22 wherein said cancer is determined to be a cancer with cancer cells that have a high rate of aerobic glycolysis by PET imaging.

24. (Original) The method of claim 22 wherein said cancer is determined to be a cancer with cancer cells that have a high rate of aerobic glycolysis by PET imaging using ¹⁸fluoro-deoxyglucose.

25. (Previously presented) The method of claim 16 wherein said ATP citrate lyase inhibitor is administered in conjunction with administration of a different anti-cancer compound.

26. (Previously presented) The method of claim 16 wherein said ATP citrate lyase inhibitor is administered in conjunction with administration of anti-cancer radiation therapy.

27-34. (Canceled)

35. (Previously presented) The method of claim 16 comprising the step of administering to said individual a therapeutically effective amount of a tricarboxylate transporter inhibitor, wherein said cancer comprises cells that are not dependent on endogenously synthesized fatty acid.

36. (Previously presented) The method of claim 16 comprising the step of administering to said individual a therapeutically effective amount of a tricarboxylate transporter inhibitor, wherein said tricarboxylate transporter inhibitor is selected from the group consisting of: 1,2,3-benzenetricarboxylate, isocitrate, malate, phosphoenolpyruvate, n-butylmalonate, sulphydryl reagents, diethyl pyrocarbonate, 2,3-butanedione, phenylglyoxal, pyridoxal, 5-phosphate dicarboxylates, succinate, malate, oxaloacetate, tricarboxylates isocitrate, tricarballylate and palmitoyl-CoA.

37. (Previously presented) The method of claim 16 comprising the step of administering to said individual a therapeutically effective amount of a tricarboxylate transporter inhibitor, wherein said cancer is determined to be a cancer with cancer cells that have a high rate of aerobic glycolysis.

38-48. (Canceled)

49. (Previously presented) The method of claim 1 comprising the step of administering to said individual a therapeutically effective amount of a tricarboxylate transporter inhibitor; wherein said tricarboxylate transporter inhibitor is selected from the group consisting of: 1,2,3-benzenetricarboxylate, isocitrate, malate, phosphoenolpyruvate, n-butylmalonate, sulphydryl reagents, diethyl pyrocarbonate, 2,3-butanedione, phenylglyoxal, pyridoxal, 5-phosphate dicarboxylates, succinate, malate, oxaloacetate, tricarboxylates isocitrate, tricarballylate and palmitoyl-CoA.

50. (Previously presented) The method of claim 1 comprising the step of further administering to said individual a different anti-cancer compound.

51. (Previously presented) The method of claim 1 comprising the step of further administering to said individual anti-cancer radiation therapy.

52. (Original) A method of treating an individual who has been identified as having cancer comprising administering to said individual a therapeutically effective amount of a compound which inhibits the expression of ATP citrate lyase or tricarboxylate transporter.

Docket No.: 130694.1201
PATENT

Serial No.: 10/556,220
Filed: December 4, 2006

53. (Previously presented) The method of claim 52 wherein said cancer is a cancer that comprises cancer cells that have a high rate of aerobic glycolysis.

54-57. (Canceled)